July 29, 1964

T. Nelson
Literatore
Box 1546
Poughkeepsie, N.Y. 12603

Dear Sir:

Subject: KD 5010

Your inquiry regarding the subject product is appreciated.

Enclosed you will find our brochure describing the product
in more detail. A copy of this letter is being forwarded
to our sales representative in your area who can offer you
additional information regarding our capabilities, products
and services.

Very truly yours,

ITT KELLOGG COMMUNICATIONS SYSTEMS

R. E. Nelson, Manager
Marketing Services

Encl.:   KD 5010

cc: V. Calo
       N. Sabye

KD-5010

A new solid state data storage, display and transmission system has been developed by ITT Kellogg Communications Systems for use in electronic data processing and digital communication systems. This system is designed for applications requiring high reliability and rapid message composition and transmission.

The equipment uses a proven, reliable drum memory and standard monoscope character generation coupled with cathode ray tube display (a solid state character generator is also available). The system is capable of storing more than 100 pre-formatted messages of several hundred characters each. Complete messages are rapidly called-up for display and transmission.

The associated keyboard has the capability of generating control characters in addition to standard alpha-numeric characters and symbols. This facilitates the programming as well as composition of the message on one keyboard. The keyboard also has provisions for calling up any of the stored messages. Any portion of the message can be erased, added to, changed, or completely recomposed.

Data Storage, Display and Transmission System

A new technique of rapidly addressing the messages and the acknowledgement of their receipt from a remote addressee is incorporated in the system.

The diagnostic test logic and associated self-check circuitry provide the capability of periodic and running checks of the system operation.

The equipment can be interfaced with standard data processing equipment and output devices.

operation

Message formats are composed on the keyboard and stored on individual magnetic drum tracks.

Each message has an associated call-up code. These codes are stored on a separate drum track.

Message recipients are selected by depressing address switches on the address panel. Illumination of the lamps associated with the address panel indicates three different conditions.

> White   Idle or unselected
> Red   Selected to receive message
> Green   Message received

After addressing is complete, the make up of a message is accomplished as follows:

The call up code of the particular message format desired is inserted at the keyboard. This causes the message format to be transferred from format storage to message storage and the format is displayed on the cathode ray tube display.

Through the use of the keyboard, additional required information in the form of alpha-numeric characters and symbols is added to the format in the message storage and displayed in the proper location on the visual display. Once the message is complete, it is transmitted by pressing a transmit switch which causes the complete message to be routed through the traffic unit and then to the message routing equipment and transmitters.

applications

1 Completely formated messages can be composed, stored indefinitely and then upon receipt of a coded word from the keyboard or other remote sources, be displayed and transmitted.
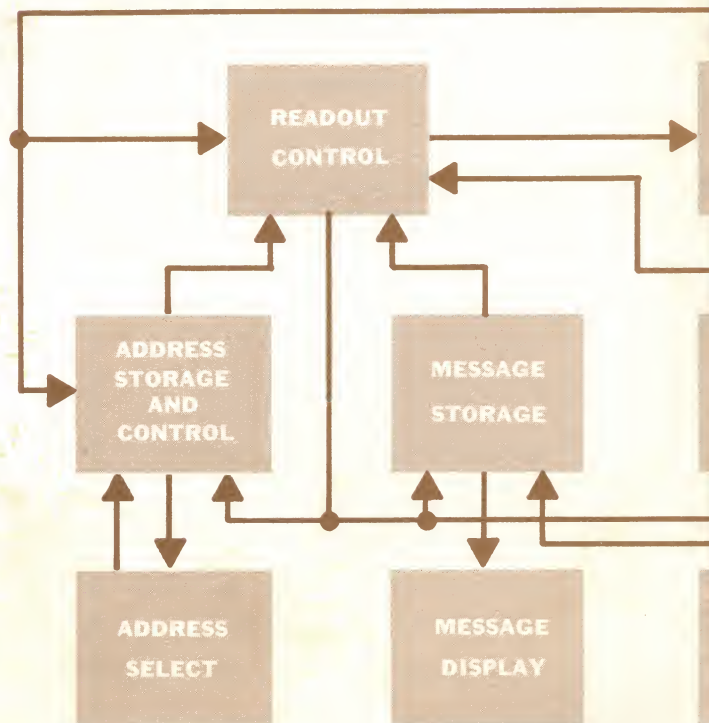
2 Partially formated messages can be composed, stored indefinitely and then upon receipt of a coded word from the keyboard be displayed on the CRT. Variable information can then be added to the format and the information transmitted.
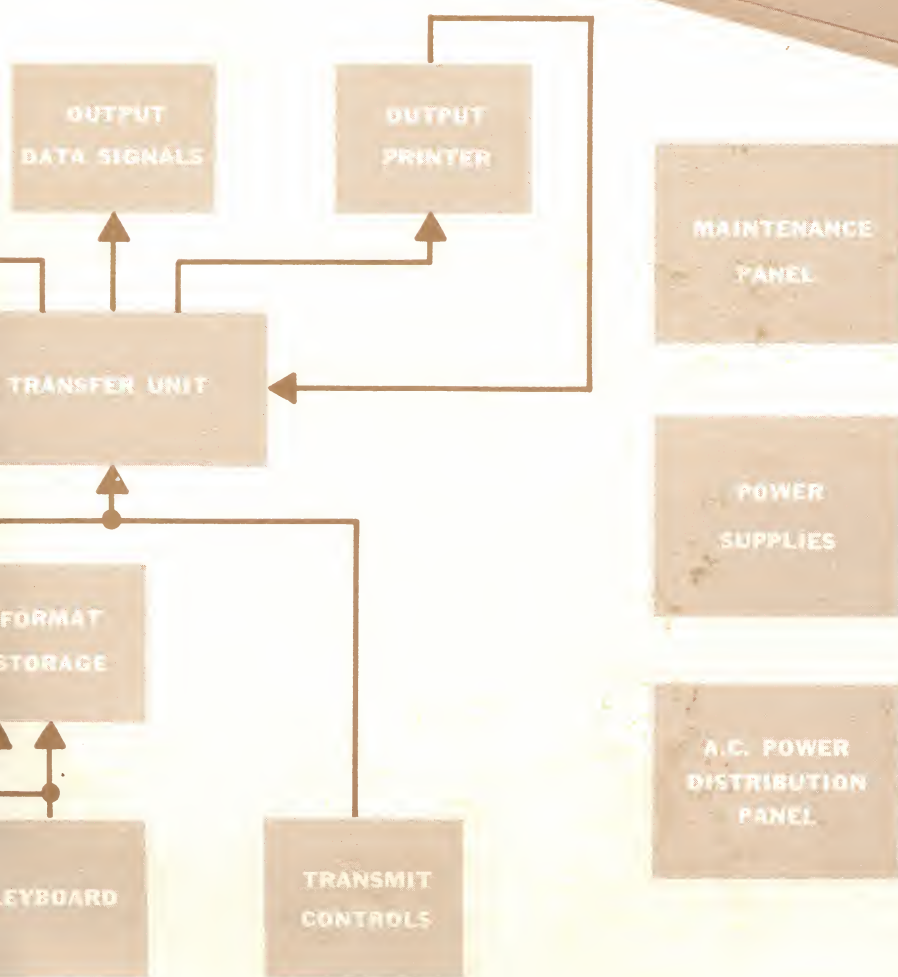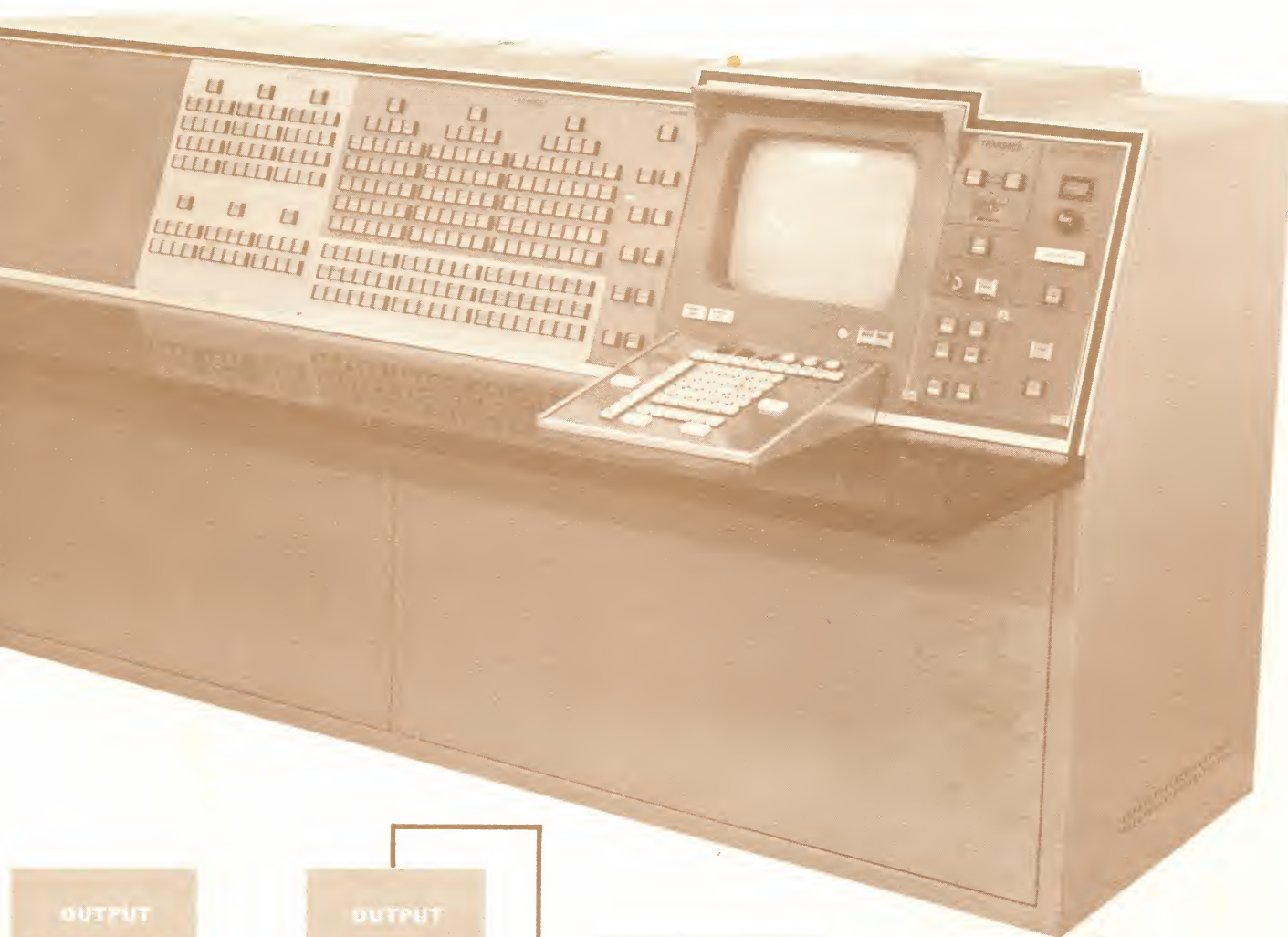
3 A message can simultaneously be composed and monitored on the CRT and then transmitted.

4 A completely formated program for industrial control or computer programming can be stored and then automatically transmitted upon receipt of a command from the keyboard.
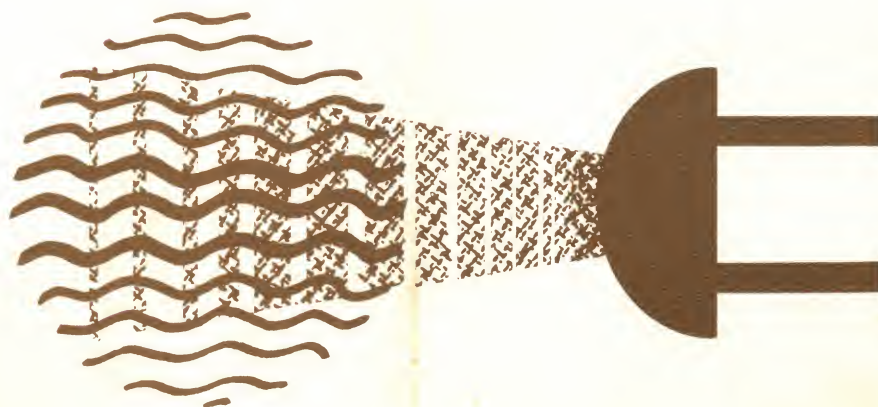
Alert Transmit Console

block diagram

READOUT CONTROL

ADDRESS STORAGE AND CONTROL

MESSAGE STORAGE

ADDRESS SELECT

MESSAGE DISPLAY

OUTPUT
DATA SIGNALS

OUTPUT
PRINTER

MAINTENANCE
PANEL

TRANSFER UNIT

POWER
SUPPLIES

FORMAT
STORAGE

A.C. POWER
DISTRIBUTION
PANEL

KEYBOARD

TRANSMIT
CONTROLS

features

Keyboard	Generates 8 bit alpha numeric characters and control functions
Magnetic Drum	More than 100 message storage tracks Several hundred message characters per track Two clock tracks Rotational speed—3000 + RPM
CRT Display	19″ CRT display with standard monoscope character generator (a solid state character generator is also available) Message length—several hundred characters
Transmission	600 characters/sec in parallel 8 bit field data code
Special Features	Push button addressing of 220 stations Three addressee conditions and lamp indications Idle—white Station addressed—red Acknowledgment of receipt of message—green
Automatic Lamp Tester	Test sequence locates burned out lamps
Diagnostic Test	Tests equipment logic and drum operation logic and indicates malfunctions on a rear maintenance panel
Loop Test	Message transmitted to terminal equipment is sent back to the Alert Transmit Console and printed out on an associated printer
Klaxon Message	Message alerts receiving stations by triggering an audible device
Retransmit Feature	Message can be retransmitted to all stations without having to be re-formated
Transmission Security	Two controllers are required to activate two separate switches in order that a message be transmitted
Equipment Security	All access panels have key locks
Emergency Operation	Auxiliary keyboard can be used when primary keyboard is inoperative
Power Requirements	120 volts ± 10 volts A.C. 30 amps
Temperature	Operating: 21°C to 27°C
Applicable Military Specifications	MIL-E-4158B MIL-T-4807A MIL-R-26474 MIL-STD-188A

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